

WHAT IS CLAIMED IS:

1. A complex of clay silicate and polyoxyalkylene amine grafted polypropylene, which is formed by modifying inorganic layered silicate clay with an amphibious intercalating agent obtained by polymerizing polyoxyalkylene amine having molecular weight over 1,800 and polypropylene-grafting-maleic anhydride (PP-g-MA).
2. The complex of claim 1, wherein said polyoxyalkylene amine is polyoxyalkylene diamine.
3. The complex of claim 1, wherein said polyoxyalkylene amine is selected from a group consisting of polyoxypropylene diamine, polyoxyethylene diamine and poly(oxyethylene-oxypropylene) diamine.
4. The complex of claim 1, wherein said clay is selected from a group consisting of montmorillonite, kaolin, mica and talc.
5. The complex of claim 1, wherein said clay has a cation exchange capacity between 50-200 meq/100g.
6. A method for producing a complex of clay and polyoxyalkylene amine, wherein said clay is layered and includes silicate; said method is primarily to polymerize said polyoxyalkylene amine having molecular weight over 1,800 and polypropylene-grafting-maleic anhydride (PP-g-MA) to form an amphibious intercalating agent, which is then acidified with an inorganic acid, and mixed with said swelled clay by powerfully stirring at 60-80°C for cation exchanging to obtain said complex.
7. The method of claim 6, wherein said clay is selected from a group consisting of montmorillonite, kaolin, mica and talc.
8. The method of claim 6, wherein said clay has a cation exchange

capacity between 50-200 meq/100g.

9. The method of claim 6, wherein said polyoxyalkylene amine is polyoxyalkylene diamine.

10. The method of claim 6, wherein said polyoxyalkylene amine is
5 selected from a group consisting of polyoxypropylene diamine, polyoxyethylene diamine and poly(oxyethylene-oxypropylene) diamine adduct.

11. The method of claim 6, wherein said inorganic acid is selected from a group consisting of hydrochloric acid, sulfuric acid, phosphoric acid and nitric acid.

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